



SystemC CCI WG

Default vs. Preset Values

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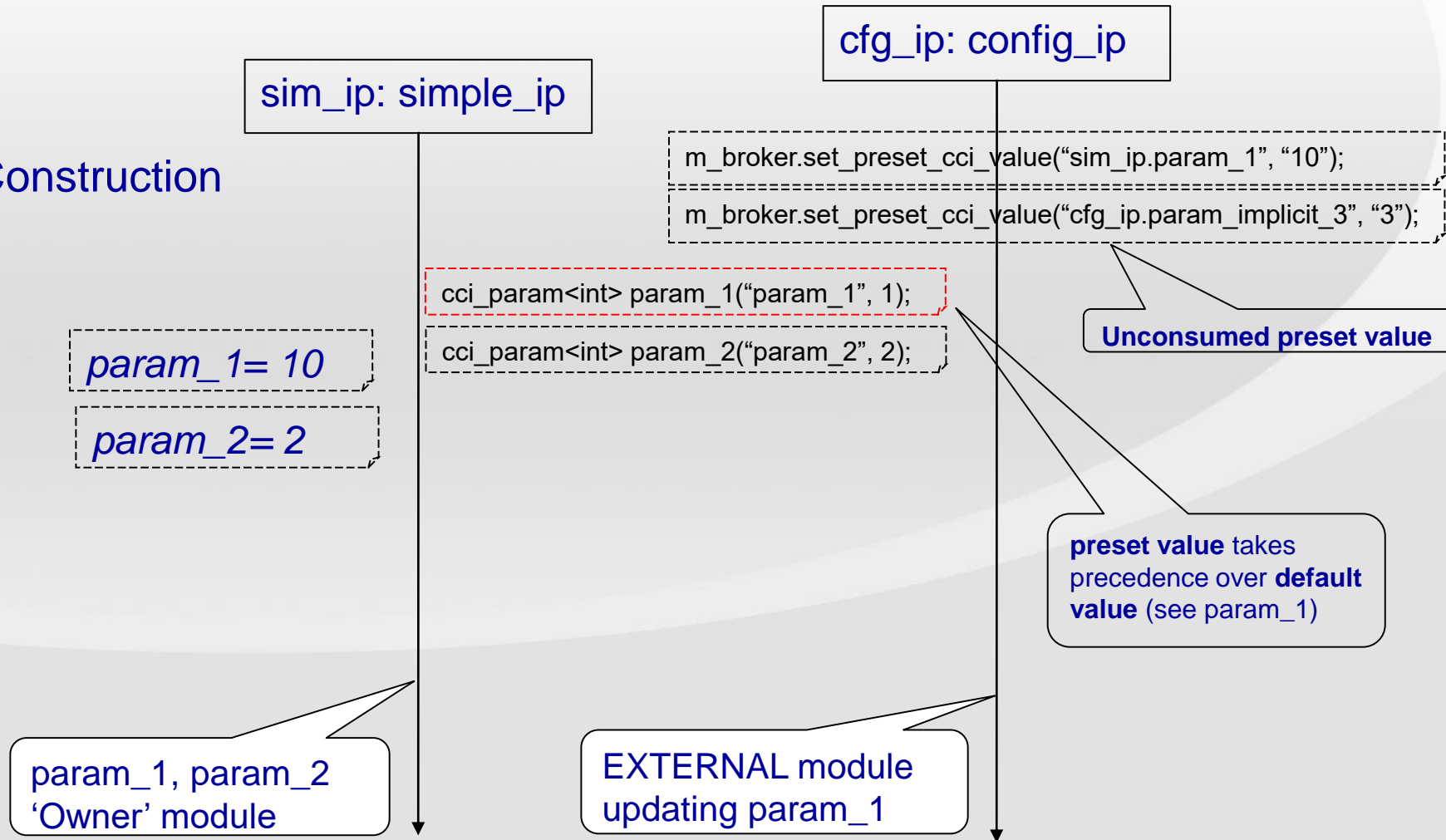


Default vs. Preset values of a parameter

- Demonstrate relative precedence of default (supplied to parameter constructor) and preset (via name-based broker access prior to construction) values.
- User module specifies some default value for different parameters in respective constructors.
- Set one of the parameters to a different value from a tool/configurator, before the user module's construction.
- Report the various parameters' name (hierarchical) and value in the constructor and at the end of simulation.
- Demonstrate the reporting of unconsumed preset values with filtering functions.

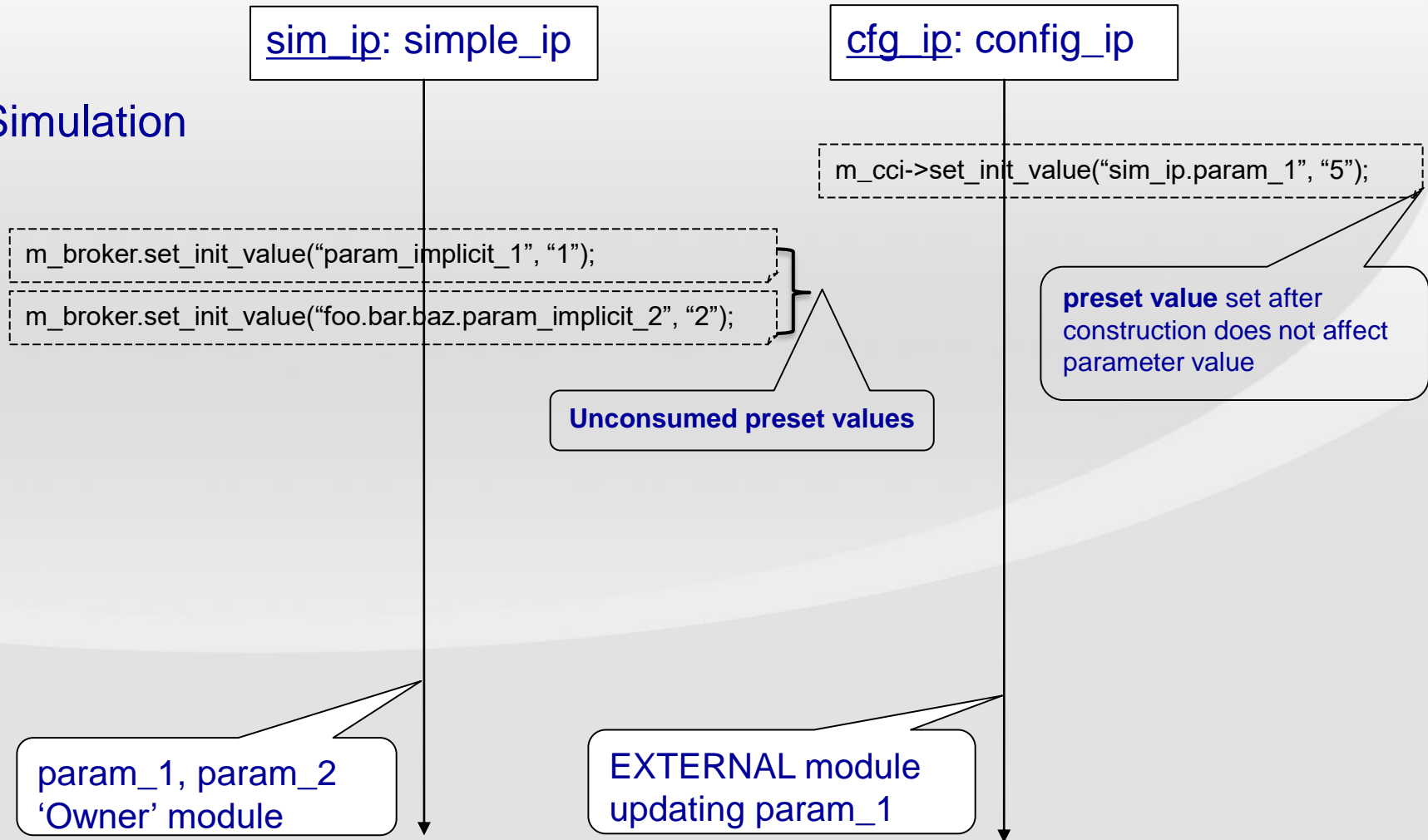
Example Sequence Diagram

@Construction



Cont'd

@Simulation



Expected Output

(ex05_Default_and_Preset_Value.log)

SystemC Simulation

```
Info: cfg_ip: @@ s, Attempting to setup config_ip to 10 before IP construction
Info: cfg_ip: @@ s, Setting up sim_ip.param_1's preset value to 10
Info: cfg_ip: @@ s, Setting up cfg_ip.param_implicit_3's preset value to 3
Info: sim_ip: @@ s, @Ctor: Value of sim_ip.param_1 is 10 (Default value Specified: 1)
Info: sim_ip: @@ s, @Ctor: Value of sim_ip.param_2 is 2 (Default value Specified: 2)
Info: sc_main: Begin Simulation.
Info: cfg_ip: @@ s, execute: [EXTERNAL] Current value of sim_ip.param_1 is 10
Info: sim_ip: @@ s, Setting up param_implicit_1's preset value to 1
Info: sim_ip: @@ s, Setting up foo.bar.baz.param_implicit_2's preset value to 2
Info: sim_ip: @@ s, Unconsumed preset cci values:
cfg_ip.param_implicit_3
foo.bar.baz.param_implicit_2
param_implicit_1
Info: sim_ip: @@ s, Ignore unconsumed values cfg_ip.*
Info: sim_ip: @@ s, Unconsumed preset cci values result:
```

Cont'd

```
foo.bar.baz.param_implicit_2
```

```
param_implicit_1
```

```
Info: sim_ip: @0 s, Unconsumed preset cci values with value = 2:
```

```
foo.bar.baz.param_implicit_2
```

```
Info: sc_main: End Simulation.
```

```
Info: sim_ip: @Dtor: Value of sim_ip.param_1 is 10
```

```
Info: sim_ip: @Dtor: Value of sim_ip.param_2 is 2
```